DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



No

N/A

Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

OBG

File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Casey, William **Report No:** WIR-028688 Address: 333 Burma Road **Date Inspected:** 24-Oct-2012

City: Oakland, CA 94607

34-0006

Project Name: SAS Superstructure **OSM Arrival Time:** 700 **OSM Departure Time:** 1730 Prime Contractor: American Bridge/Fluor Enterprises, a JV

Contractor: American Bridge/Fluor Enterprises, a JV **Location:** Job site

CWI Name: CWI Present: Yes No N/A **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No **Weld Procedures Followed:** Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:**

Component:

Yes **Delayed / Cancelled:**

Summary of Items Observed:

Bridge No:

Quality Assurance Inspector (QAI) Rodney Patterson was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

This QA performed verification Ultrasonic Testing (UT) on Complete Joint Penetration (CJP) Deck drop-in related welds for lift 13W. The welds were previously tested and accepted by QC Ultrasonic technicians in accordance with AWS D1.5-2002, section 6, table 6.3. The QAI's findings are as follows;

13W Deck Drop-in Flange Splice (Weld No. 13W-PP122-E2.5-BF1)

The QAI performed 100% verification of this weld. No rejectable indications were observed at the time of inspection.

13W Deck Drop-in Flange Splice (Weld No. 13W-PP123-E2.8-BF1)

The QAI performed 50% verification of this weld from Y=0~220. No rejectable indications were observed at the time of inspection.

13W Deck Drop-in Longitudinal Deck Splice (Weld No. 13W-W2.2)

The QAI performed verification in way of repairs at Y=110, Y=4800, and Y=4910 rejected by the QAI on 08-27-2012.

The QAI was provided the approval for repair document history for this weld by the QA task leader, for ultrasonic verification and closure of the listed repair documents at the following locations;

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Y=130 RWR-201209-018

Y=135 RWR-201208-012

Y=3520 RWR-201208-013

Y=4800 RWR-201209-019

Y=4910 RWR-201209-020

No rejectable indications were observed at the time of inspection.

Magnetic Particle Testing (OBG 13W)

This QA Inspector performed verification Magnetic Particle Testing (MT) of the lift 13W Deck Drop-in connections. This QA Inspector generated a TL-6028 MT report on this date. The results of the inspection are as follows:

13W Deck Drop-in Flange Splice (Weld No. 13W-PP122-E2.5-BF1)

The QAI performed 100% verification of this weld from face A and B. No rejectable indications were observed at the time of inspection.

13W Deck Drop-in Flange Splice (Weld No. 13W-PP123-E2.8-BF1)

The QAI performed 100% verification of this weld from face A and B. No rejectable indications were observed at the time of inspection.

13W Deck Drop-in Longitudinal Deck Splice (Weld No. 13W-PP123-E2.8-BF1)

The QAI was provided the approval for repair document history for this weld by the QA task leader, for magnetic particle verification and closure of the listed repair documents at the following locations;

Y=130 RWR-201209-018

Y=135 RWR-201208-012

Y=3520 RWR-201208-013

Y=4800 RWR-201209-019

Y=4910 RWR-201209-020

No rejectable indications were observed at the time of inspection.

The QAI was tasked with performing exploratory ultrasonic testing to determine the depth of penetration on the west jacking frame in way of a previous crack repair with an existing drill stop at the repair termination. The location of repair as well as the surrounding area was ultrasonically examined by the use of a 70 and 45 degree probe in legs I/II. The required weld size of the tested weld was 14mm.

The exploratory ultrasonic testing showed that approximate penetration east of the repaired area to be between 12mm~18mm.

A 75mm area around the drill stop at the termination of the repair showed an approximate penetration between 8mm~11mm.

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The repaired area 75mm west of the drill stop showed an approximate penetration between 13mm~30mm. The QAI observed multiple indications in the repair in leg II that appeared to be from the reinforcement of the weld.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

Conversations relevant to the work being performed.





Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Gary Thomas (916) 764-6027, who represents the Office of Structural Materials for your project.

| Inspected By: | Patterson,Rodney | Quality Assurance Inspector |
|---------------|------------------|-----------------------------|
| Reviewed By: | Reyes,Danny | QA Reviewer |